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ABSTRACT

This book applies "new science"--the discoveries and hypotheses in biology, chemistry, and physics that challenge fundamental world views--to organizational change. The focus is on new ways about thinking about organizations. The introduction and chapter 1 introduce three branches of science and their contributions to understanding--quantum physics, self-organizing systems, and chaos theory. Chapters 2 through 4 explore the implications of quantum physics for organizational designs and practices for large, complex systems. Chapters 5 and 6 deal with the theory of self-organizing or dissipative structures. They introduce new ways of understanding disequilibrium and change, as well as the uses of disorder in creating new possibilities for evolutionary growth. Chaos theory is the subject of chapter 7, which proposes a hypothesis to explain forces in organizations that create durable structure. The eighth chapter and the epilogue draw together various principles from the new science to offer a "new" scientific approach to management. Four figures, 10 photographs, an index, and a list of suggested readings are included. (Contains 78 references.) (LMI)

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